

I hereby certify that this correspondence is being
delivered by hand to:

Technology Center 1600
Assistant Commissioner for Patents
Washington, D.C. 20231

On 12 / 09 / 02

TOWNSEND and TOWNSEND and CREW LLP

By: MAI HAN VO

PATENT
Attorney Docket No.: 015270-006441US
Client Reference No.: 228-US-NEW2C1

#10

RECEIVED
TECH CENTER 1600/2900
02 DEC - 9 PM 1:54

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Anderson, John P. et al.

Application No.: 09/723,722

Filed: November 28, 2000

For: BETA-SECRETASE ENZYME
COMPOSITIONS AND METHODS

Examiner: Celine X. Qian

Art Unit: 1636

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Technology Center 1600
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached PTO/SB/08A and PTO/SB/08B forms are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 09/471,669, filed December 24, 1999 (Attorney Docket No. 015270-006430US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Cite no. 78 is a copy of the International Search Report issued for the corresponding International application, PCT/US00/03819. Cite No. 65 is a copy of a press release announcing that Elan Corporation, plc and Pharmacia Corporation entered into a research collaboration focused on the discovery of small molecule inhibitors of beta-secretase for the

treatment of Alzheimer's disease. Elan Pharmaceuticals, Inc. assignee of the instant application, is affiliated with Elan Corporation, plc.

Applicants also cite commonly owned copending applications and issued patents directed to related subject matter:

08/480,498, filed 06/07/95, issuing as US Patent 5,744,346 on April 28, 1998;
08/485,152, filed 06/07/95;
08/659,984, filed 06/07/96, issuing as US Patent 5,942,400 on August 24, 1999;
08/660,531, filed 06/07/96, issuing as US Patent 6,221,645 on April 24, 2001;
09/054,334, filed 04/02/98, issuing as US Patent 6,329,163 on December 11, 2001;
09/404,578, filed 09/23/99;
09/471,669, filed 12/24/99;
09/501,708, filed 02/10/00;
09/723,722, filed 11/28/00;
09/723,739, filed 11/28/00;
09/724,568, filed 11/28/00;
09/724,566, filed 11/28/00;
09/724,569, filed 11/28/00;
09/724,571, filed 11/28/00; and,
10/099,922, filed 03/15/02;

Applicants further cite the following commonly owned abandoned applications directed to related subject matter:

60/114,408, filed 12/31/98;
60/119,571, filed 02/10/99;
60/139,172, filed 06/15/99;
60/168,854, filed 12/02/99; and,
09/730,329, filed 12/04/00.

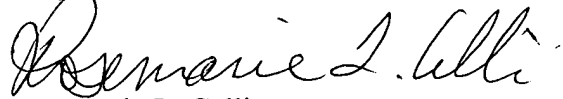
As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference

should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Rosemarie L. Celli
Reg. No. 42,397

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
RLC:rlc
PA 3269346 v2



PTO/SB/08A (10-01)

Approved for use through 10/31/2002 PMS 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 6

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

U.S. PATENT DOCUMENTS

| Examiner | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|----------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
| | | Number Kind Code ² (if known) | | | |
| | 1 | 6,361,975 | 03-26-2002 | Christie, et al. | |
| | 2 | 6,358,725 | 03-19-2002 | Christie, et al. | |
| | 3 | 6,319,489 | 11-20-2001 | Powell, et al. | |
| | 4 | 6,319,689 | 11-20-2001 | Powell, et al. | |
| | 5 | 6,313,268 | 11-06-2001 | Hook | |
| | 6 | 6,245,884 | 06-12-2001 | Hook | |
| | 7 | 6,245,964 | 06-12-2001 | McConlogue, et al. | |
| | 8 | 6,221,645 | 04-24-2001 | Chrysler, et al. | |
| | 9 | 6,211,428 | 04-03-2001 | Singh, et al. | |
| | 10 | 6,162,630 | 12-19-2000 | Powell, et al. | |
| | 11 | 6,025,180 | 02-15-2000 | Powell, et al. | |
| | 12 | 5,942,400 | 08-24-1999 | Anderson, et al. | |
| | 13 | 5,877,015 | 03-02-1999 | Hardy, et al. | |
| | 14 | 5,849,560 | 12-15-1998 | Abraham | |
| | 15 | 5,837,672 | 11-17-1998 | Schenk, et al. | |
| | 16 | 5,795,963 | 08-18-1998 | Mullan | |
| | 17 | 5,766,846 | 06-16-1998 | Schlossmacher, et al. | |
| | 18 | 5,750,349 | 05-12-1998 | Suzuki, et al. | |
| | 19 | 5,744,346 | 04-28-1998 | Chrysler, et al. | |
| | 20 | 5,733,768 | 03-31-1998 | Dixon, et al. | |
| | 21 | 5,593,846 | 01-14-1997 | Schenk, et al. | |
| | 22 | 5,455,169 | 10-03-1995 | Mullan | |
| | 23 | 5,424,205 | 06-13-1995 | Dovey, et al. | |
| | 112 | 09/869,414 | | Gurney, et al. | |
| | 90 | 09/794,927 | | Gurney, et al. | |
| | 91 | 09/794,925 | | Gurney, et al. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ³ Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3269625 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 6

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

U.S. PATENT DOCUMENTS

| Examiner | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|----------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
| | | Number Kind Code ² (if known) | | | |
| | 89 | 09/795,847 | NA | Gurney, et al. | |
| | 92 | 09/794,748 | | Gurney, et al. | |
| | 88 | 09/794,743 | | Gurney, et al. | |
| | 111 | 09/681,442 | | Gurney, et al. | |
| | 87 | 09/551,853 | | Gurney, et al. | |
| | 96 | 09/548,376 | | Gurney, et al. | |
| | 24 | 09/548,373 | | Gurney, et al. | |
| | 99 | 09/548,372 | | Gurney, et al. | |
| | 94 | 09/548,370 | | Gurney, et al. | |
| | 97 | 09/548,369 | | Gurney, et al. | |
| | 100 | 09/548,368 | | Gurney, et al. | |
| | 98 | 09/548,367 | | Gurney, et al. | |
| | 25 | 09/548,366 | | Gurney, et al. | |
| | 95 | 09/548,365 | | Gurney, et al. | |
| | 26 | 09/416,901 | | Gurney, et al. | |
| | 27 | 09/404,133 | | Gurney, et al. | |
| | 28 | 09/277,229 | | Citron, et al. | |
| | 29 | 60/210,292 | | Hong, et al. | |
| | 30 | 60/178,368 | | Lin, et al. | |
| | 31 | 60/177,836 | | Lin, et al. | |
| | 32 | 60/168,060 | | Lin, et al. | |
| | 33 | 60/155,493 | | Gurney, et al. | |
| | 34 | 60/141,363 | | Lin, et al. | |
| | 35 | 60/139,172 | | Anderson, et al. | |
| | 36 | 60/119,571 | | Basi, et al. | |
| | 37 | 60/114,408 | | Basi, et al. | |
| | 38 | 60/101,594 | | Gurney, et al. | |

Examiner
SignatureDate
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3269625 v1



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 6

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|--------------------------|------------------------------|------------------------------------------------|--------------------------------------|--------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------|----------------|
| Examiner Initials* | Cite No. ¹ | Country Code ³ | Foreign Patent Document Number ⁴ | Kind Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | 39 | EP | EP 0 855 444 | A2 | 07-29-1998 | | | |
| | 40 | EP | EP 0 848 062 | A2 | 06-17-1998 | | | |
| | 48 | PCT | WO 01/38487 | A2 | 05-31-2001 | | | |
| | 49 | PCT | WO 01/36600 | A1 | 05-25-2001 | | | |
| | 50 | PCT | WO 01/31054 | A1 | 05-03-2001 | | | |
| | 51 | PCT | WO 01/29563 | A1 | 04-26-2001 | | | |
| | 52 | PCT | WO 01/00665 | A2 | 01-04-2001 | | | |
| | 53 | PCT | WO 01/00663 | A2 | 01-04-2001 | | | |
| | 47 | PCT | WO 00/69262 | A1 | 11-23-2000 | | | |
| | 46 | PCT | WO 00/68266 | A1 | 11-16-2000 | | | |
| | 45 | PCT | WO 00/58479 | A1 | 10-05-2000 | | | |
| | 44 | PCT | WO 00/56871 | A2 | 09-28-2000 | | | |
| | 43 | PCT | WO 00/47618 | A3 | 08-17-2000 | | | |
| | 42 | PCT | WO 00/23576 | A2 | 04-27-2000 | | | |
| | 41 | PCT | WO 00/17369 | A2 | 03-30-2000 | | | |
| | 54 | PCT | WO 99/64587 | A1 | 12-16-1999 | | | |
| | 55 | PCT | WO 99/46281 | A2 | 09-16-1999 | | | |
| | 57 | PCT | WO 99/34004 | A2 | 08-07-1999 | | | |
| | 59 | PCT | WO 99/31236 | A2 | 06-24-1999 | | | |
| | 60 | PCT | WO 98/26059 | | 06-18-1998 | | | |
| | 61 | PCT | WO 98/21589 | | 05-22-1998 | | | |
| | 62 | PCT | WO 98/13488 | | 04-02-1998 | | | |
| | 63 | PCT | WO 98/11236 | | 03-19-1998 | | | |
| | 103 | PCT | WO 97/47314 | | 12-18-1997 | | | |
| | 56 | PCT | WO 96/40885 | A2 | 12-19-1996 | | | |
| | 58 | PCT | WO 96/31122 | A1 | 10-10-1996 | | | |
| | 102 | PCT | WO 96/20725 | A2 | 07-11-1996 | | | |
| Examiner Signature | | | | | Date Considered | | | |

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231
PA 3269625 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 4 of 6

Complete if Known

| | |
|------------------------|-------------------|
| Applicant Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|---------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | 104 | Baldwin, et al., Crystal structures of native and inhibited forms of human cathepsin D: Implications for lysosomal targeting and drug design, <i>PNAS USA</i> , 90:6796-6800 (1993). | |
| | 105 | Brown, et al., Evaluation of Cathepsins D and G and EC 3.4.24.15 as Candidate β -Secretase Proteases Using Peptide and Amyloid Precursor Protein Substrates, <i>Journal of Neurochemistry</i> , 66: 2436-2445 (1996). | |
| | 106 | Chevallier, et al., Cathepsin D displays in vitro β -secretase-like specificity, <i>Brain Research</i> , 750:11-19 (1997). | |
| | 64 | Chyung, et al. Novel β -Secretase Cleavage of β -Amyloid Precursor Protein in the Endoplasmic Reticulum/Intermediate Compartment of NT2N Cells, <i>Journal of Cell Biology</i> , 138: 671-680 (August 11, 1997). | |
| | 107 | Diedrich, et al., Nucleotide sequence of a cDNA encoding mouse cathepsin D, <i>Nucleic Acids Research</i> , 18:7184 (1990). | |
| | 65 | Elan Corporation, plc and Pharmacia Corporation announce research collaboration, News 08/09/2000, www.elancorp.com. | |
| | 66 | Evin, et al., Alzheimer's disease amyloid precursor protein (β APP): proteolytic processing, secretases and β A4 amyloid production, <i>Amyloid; Int. J. Exp. Clin. Invest.</i> 1: 263-280 (September 8, 1994). | |
| | 67 | Haass, et al., Amyloid β -peptide is Produced by Cultured Cells During Normal Metabolism, <i>Nature</i> , 359: 322-325 (September 24, 1992). | |
| | 68 | Haass, et al., The Swedish Mutation Causes Early-Onset Alzheimer's Disease by β -Secretase Cleavage Within the Secretory Pathway, <i>Nature Medicine</i> , 12: 1291-1296 (December 1995). | |
| | 69 | Haass, et al., β -Amyloid Peptide and 3-kDa Fragment are Derived by Distinct Cellular Mechanisms, <i>Journal of Biochemistry</i> , 268: 3021-3024 (February 15, 1993). | |
| | 70 | Hirosawa, et al., Characterization of cDNA Clones Selected by the GeneMark Analysis from Size-Fractionated cDNA Libraries From Human Brain, <i>DNA Res.</i> , 6(5): 329-336 (October 29, 1999). | |

Examiner
SignatureDate
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PA 3269625 v1

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 5

of

6

Complete if Known

| | |
|------------------------|-------------------|
| Applicati n Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | 71 | Hussain, et al., Identification of a Novel Aspartic Protease (Asp 2) as β -Secretase, <i>Molecular and Cellular Neuroscience</i> , 14: 419-427 (1999). | |
| | 72 | Kang, et al., The Precursor of Alzheimer's Disease Amyloid A4 Protein Resembles a Cell-Surface Receptor, <i>Nature</i> , 325: 733-736 (February 19, 1987). | |
| | 73 | Kitaguchi, et al., Novel Precursor of Alzheimer's Disease Amyloid Protein Shows Protease Inhibitory Activity, <i>Nature</i> , 331: 530-532 (February 11, 1988). | |
| | 74 | Knops, et al., Cell-type and Amyloid Precursor Protein-type Specific Inhibition of $A\beta$ Release by Bafilomycin A1, a Selective Inhibitor of Vacuolar ATPases, <i>Journal of Biological Chemistry</i> , 270: 2419-2422 (February 10, 1995). | |
| | 75 | Koo and Squazzo, Evidence that Production and Release of Amyloid β -Protein Involves the Endocytic Pathway, <i>Journal of Biological Chemistry</i> , 269: 17386-17389 (July 1, 1994). | |
| | 108 | Majer, et al., Structure-based subsite specificity mapping of human cathepsin D using statine-based inhibitors, <i>Protein Science</i> , 6:1458-1466 (1997). | |
| | 76 | Mullan, et al., A Pathogenic Mutation for Probable Alzheimer's Disease in the APP Gene at the N-Terminus of β -Amyloid, <i>Nature Genetics</i> 1: 345-347, (August 1992). | |
| | 77 | PCT Search report for PCT/US99/20881 | |
| | 78 | PCT Search report for PCT/US00/03819 | |
| | 79 | Ponte, et al., A New A4 Amyloid mRNA Contains a Domain Homologous to Serine Proteinase Inhibitors, <i>Nature</i> , 331: 525-527 (February 11, 1988). | |
| | 109 | Saftig, et al., Amyloidogenic Processing of Human Amyloid Precursor Protein in Hippocampal Neurons Devoid of Cathepsin D, <i>Journal of Biological Chemistry</i> , 271:27241-27244 (1996). | |
| | 110 | Schechter, et al., On the size of the active site in proteases. I. Papain, <i>Biochemical and Biophysical Research Communications</i> , 27:157-162 (1967). | |

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3269625 v1

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 6

of 6

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 09/723,722 |
| Filing Date | November 28, 2000 |
| First Named Inventor | John P. Anderson |
| Art Unit | 1636 |
| Examiner Name | Celine X. Qian |
| Attorney Docket Number | 015270-006441US |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|---------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | 80 | Seubert, et al., Secretion of β -amyloid Precursor Protein Cleaved at the Amino Terminus of the β -amyloid Peptide, <i>Nature</i> , 361: 260-263 (January 21, 1993). | |
| | 81 | Sinha, et al., Purification and Cloning of Amyloid Precursor Protein β -Secretase from Human Brain, <i>Nature</i> , 402: 537-540 (December, 2 1999). | |
| | 82 | Szecs, The Aspartic Proteases, <i>Scand. J. Clin. Lab. Invest.</i> , 52 (suppl. 210): 5-22 (1992). | |
| | 83 | Tanzi, et al., Protease Inhibitor Domain Encoded by an Amyloid Protein Precursor mRNA Associated with Alzheimer's Disease, <i>Nature</i> , 331: 528-530 (February 11, 1988). | |
| | 93 | Thompson, et al., Expression and characterization of human β -secretase candidates metalloendopeptidase MP78 and cathepsin D in β APP-overexpressing cells, <i>Molecular Brain Research</i> , 48:206-214. | |
| | 84 | Vasser, et al., β -secretase Cleavage of Alzheimer's Amyloid Precursor Protein by the Transmembrane Aspartic Protease BACE, <i>Science</i> , 286 (5440): 735-41 (October 22, 1999). | |
| | 85 | Yan, et al., Membrane-anchored Aspartyl Protease with Alzheimer's Disease β -Secretase Activity, <i>Nature</i> , 402: 533-537 (December 2, 1999). | |
| | 101 | Young, et al., HIV-1 Protease Inhibitors Based on Hydroxyethylene Dipeptide Isosteres: An Investigation into the Role of the P ₁ -Side Chain on Structure-Activity, <i>J. Med. Chem.</i> , 35:1702-1709 (1992). | |
| | 86 | Zhao, et al., β -Secretase Processing of the β -Amyloid Precursor Protein in Transgenic Mice Is Efficient in Neurons but Inefficient in Astrocytes, <i>Journal of Biological Chemistry</i> , 271: 31407-31411 (December 6, 1996). | |

Examiner
SignatureDate
Considered

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3269625 v1